REMARKS

Claim 25 has been amended to correct informal errors and claim 30 has been amended to clarify the limitations therein. Claims 25, 27-31, 34-38, 40, 41 and 43-47 are currently pending and presented for examination. Applicant respectfully requests reconsideration and allowance of the pending claims in view of the foregoing amendments and the following remarks.

I. Amendments to the Drawings

Applicant has attached the accompanying replacement drawing sheets to provide labels for the empty numbered boxes/circles as described in the specification as requested by the Examiner.

II. Response to the Objections

Claim 25 has been amended as suggested by the Examiner on p. 3 of the April 15, 2009 Office Action.

III. Response to the 35 U.S.C. 112 Rejections

The Examiner contends the phrase "such as" in claim 30 renders the claim indefinite because it is unclear what limitations following the phrase are part of the claimed invention. Applicant has deleted the phrase "such as extended markup language," thereby rendering the rejection moot.

IV. Response to Rejections Under Section 102:

Claims 25, 27-31, 34-38, 40, 41 and 43-47 stand rejected under 35 U.S.C § 102(b), the Examiner contending that these claims are anticipated by Stripf et al (USPN 6,263,487).

a. Independent claim 25 (and all claims dependent therefrom)

Per MPEP 2131, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Applicant respectfully submits that Claim 25 is not anticipated by Stripf for at least the reason that Stripf does not expressly or inherently describe "a machine-independent program in the form of a hierarchical tree." Applicant maintains that Stripf does not expressly or inherently describe "a machine-independent program in the form of a hierarchical tree" as required in independent claim 25 for at least the reasons set forth below.

In the April 15, 2009 Office Action, the Examiner contends that Stripf's disclosure of "an object-oriented independent machine language, e.g. a java byte code" defines "a machine-

independent program in the form of a hierarchical tree" as claimed. *See* p. 5 of the Office Action. In support, the Examiner has provided an online Wikipedia document along with the April 15, 2009 Office Action that the Examiner alleges to show java byte code data structures in the form of trees.

Applicant respectfully disagrees with the Examiner's position. As set forth in Applicant's previous response (dated February 3, 2009), Java byte code is merely an intermediate representation of a Java program, which is generated by the Java compiler (see again Java bytecode by Peter Haggar submitted in the previous response). Each byte code is one byte in length and represents a machine independent instruction. At runtime, the byte code is typically converted to machine dependent code via a Java Virtual Machine (JVM). Java is merely a type of language – specifically, a class-based, object-oriented programming language - and an intermediate representation of a program in byte code of this langauge, represents an instruction, but does not expressly or inherently describe a machine-independent program in the form of a hierarchical tree.

This is clear from the Examiner's cited Wikipedia document. The Wikipedia document, cited to by the Examiner, refers to "Java libraries," which may be "the compiled byte codes of source code…to support application development in Java. Examples of such libraries include… collection libraries that implement data structures, such as lists, dictionaries, trees, and sets. Critically, it is the Java library that may be in the form of a tree, not the byte code. While the Java byte code referred to by Stripf may be utilized to compile a Java library as evidenced by the Wikipedia document, nothing in Stripf or the Wikipedia document discloses the intermediate byte code may be in the form of a hierarchical tree. Further action is required to compile the byte code of Stripf into the form of a tree. Applicant maintains that no such step to transform byte code into the form of a hierarchical tree is disclosed in Stripf.

Applicant further notes that the Examiner's interpretation of claim 31 is incorrect. Claim 31 does not specify that the hierarchical tree is in the form of byte code as alleged by the Examiner. *See* p. 5 of the April 15, 2009 Office Action. Prior to the present amendment of claim 31, claim 31 required that "the machine-independent and symbolic representation of the hierarchical tree is in the form of a byte code or markup language such as extended markup." Thus, properly interpreted, claim 31 required that the machine-independent and symbolic representation of the hierarchical tree is in the form of a byte code language or a markup

language. Both "byte code" and "markup" modify the term language. Applicant has amended claim 31 to clarify the same and to address the rejections under 35 U.S.C. 112. One skilled in the art would readily understand that claim 31 thus requires that the hierarchical tree may be built from a byte code language.

In view of the above, Applicant maintains that Stripf does not expressly or inherently describe "a machine-independent program in the form of a hierarchical tree." Accordingly, independent claim 25 is in condition for allowance. Furthermore, claims 27- 31, 34-37 are also patentable at least based on their dependency to claim 25 as well as based on their own merits.

b. Independent claim 38 (and all claims dependent therefrom)

With respect to independent claim 38, independent claim 38 requires "a component to load the machine-independent program in the form of the at least one hierarchical tree into the corresponding components of the automation system." Applicant respectfully submits, for at least the reasons set forth above with respect to independent claim 25, independent claim 38 is also in condition for allowance as Stripf does not expressly or inherently describe "a machine-independent program in the form of a hierarchical tree." Furthermore, claims 40-41 and 43-46 depend on claim 38 are patentable at least based on their dependency to claim 38 as well as based on their own merits.

c. Independent claim 47

With respect to independent claim 47, independent Claim 47 requires a computer program implementing a method for executing a program for an industrial automation system, comprising..."modules and functions being structured and networked using the input aids and optionally the display device so as to form a hierarchical tree as a machine-independent program." Applicant respectfully submits, for at least the reasons set forth above with respect to independent claim 25, independent claim 47 is also in condition for allowance as Stripf does not expressly or inherently describe "a hierarchical tree as a machine independent program."

d. Dependent claims 37 and 46

Further, Applicant submits that dependent claims 37 and 46 provide further reasons for allowance. Claims 37 and 46 each require that the objects of the machine-independent program present as a hierarchical object or operator tree are assigned a collection of infrastructure services or infrastructure functions that access the objects via containers assigned to the objects such that an infrastructure service or an infrastructure function can be used by all the objects.

The Examiner's position continues to be that Stripf discloses these limitations at col. 2, lines 35-40; Figure 2; and col. 2, lines 44-46 of Stripf. In particular, the Examiner characterizes these locations in Stripf as describing that "the portability of the code ensures that a programmable controller with a[n] execution system in the form of a Java byte code interpreter can process the Java function blocks sent to the programmable controller over the internet independently of a processor hardware architecture of the programmable controller." *See* p. 12 of the April 15, 2009 Office Action. According to the Examiner, the limitations of dependent claims 37 and 46 are anticipated by this disclosure. Applicant respectfully disagrees with the Examiner's position.

As set forth above, per MPEP 2131, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Stripf fails to do so. There is no express description in Stripf of "containers assigned to the objects such that an infrastructure service or an infrastructure function can be used by all the objects" as required in dependent claims 37 and 46. For this reason alone, dependent Claims 37 and 46 are not anticipated by Stripf.

Further, containers are certainly not an inherent element of the Java function blocks or objects of Stripf, nor has the Examiner provided any evidence of the same. Per MPEP 2112, "[i]n relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990)." Thus, even assuming Stripf discloses that the portability of its code ensures that a programmable controller with an execution system in the form of a Java byte code interpreter can process the Java function blocks sent to the programmable controller over the internet independently of a processor hardware architecture of the programmable controller, nothing in Stripf expressly or inherently describes "containers assigned to the objects such that an infrastructure service or an infrastructure function can be used by all the objects" as claimed in dependent claims 37 and 46. In view of the above, dependent claims 37 and 46 provide further reasons for allowance.

V. Conclusion

Applicant respectfully requests that the Examiner reconsider the rejections and timely pass the application to allowance. Please grant any extensions of time required to enter this paper. The commissioner is hereby authorized to charge any appropriate fees due in connection with this paper, including fees for additional claims and terminal disclaimer fee, or credit any overpayments to Deposit Account No. 19-2179.

Respectfully submitted,

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